

REMARKS

Claims 1-30 are currently pending, wherein claims 1, 23, 25, and 29 have been amended, and claim 20 has been rewritten in independent form. Applicant respectfully requests favorable reconsideration in view of the remarks presented hereinbelow.

At the outset, Applicant notes with appreciation the indication that claims 3, 4, 20-22, and 26 contain allowable subject matter and would be allowed if rewritten in independent form. Claim 20 has been rewritten in independent form. Accordingly, claim 20 and claims 21 and 22, which depend therefrom, are allowable.

On page 3 of the Office Action ("Action"), the Examiner rejects claims 1, 2, 8-18, 23, 24, and 27-30 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,993,073 to Sparkes ("Sparkes"), in view of U.S. Patent No. 4,479,240 to McKinley, Jr. ("McKinley"). Applicant respectfully traverses this rejection.

In order to support a rejection under 35 U.S.C. § 103, the Examiner must establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness three criteria must be met. First, there must be some motivation to combine the cited references. Second, there must be a reasonable expectation of success. Finally, the combination must teach each and every claimed element. In the present case, claims 1, 2, 8-18, 23, 24, and 27-30 are not rendered unpatentable over the combination of Sparkes and McKinley the combination fails to disclose each and every claimed element as discussed below.

Independent claims 1 and 29 define a system and method, respectively, for receiving audio signals from a plurality of microphones and transferring the audio signals via a common composite signal channel to a receiving unit. The system

includes, *inter alia*, at least two satellite units, each having a separate housing, a microphone signal input, a composite signal channel input, and summing means for summing a microphone signal and a composite signal; and a master unit having a composite signal channel input and signal converting means for converting the composite signal into a master signal which is provided to the receiving unit via a master signal output. In addition, each satellite unit is positionable away from the receiving unit and connected to the common composite signal channel such that the microphone signal received at the respective satellite unit is added to the composite signal which is fed to the master unit.

Sparkes discloses a digital signal mixing device that includes a plurality of input channels for analog signals, an interface circuit incorporating an analog to digital converter, and digital signal processing means for conditioning the digital signal to effect, for example, volume control, tone control, and introduce other musical effects. However, as illustrated in Fig. 4 of Sparkes, each of the input channels 29-33 are contained within a single housing. McKinley discloses an audio mixing console with control element position storage. However, McKinley, like Sparkes, fails to disclose or suggest separately housed satellite units as claimed.

Since Sparkes and McKinley both fail to disclose or suggest at least two satellite units, each having a separate housing, a microphone signal input, a composite signal channel input, and summing means for summing a microphone signal and a composite signal as claimed, the combination of these two references cannot possibly disclose or suggest said element. Therefore, even if one skilled in the art were motivated to combine Sparkes and McKinley, which Applicant does not concede, the combination

would still fail to render claim 1 unpatentable because the combination fails to disclose each and every claimed element.

Claim 2, which depends from independent claim 1, defines a system for receiving audio signals that includes, in addition to the elements of claim 1, that the composite signal output of a first satellite unit is connected to the composite signal channel input of the master unit, the composite signal output of a second satellite unit is connected to the composite signal input of the first satellite unit, and signals received at the composite signal input and at the microphone signal input of the respective satellite units are added by the respective summing means and provided at the composite signal output.

In rejecting claim 2, the Examiner points to the combination of Sparkes and McKinley presented with regard to claim 1 as disclosing each and every claimed element. However, the external processing equipment 18 of McKinley, which the Examiner points to as being equivalent to the claimed master unit, receives input only from the mixing console 14. Therefore, even if one skilled in the art were motivated to modify the system of Sparkes to include external processing equipment as disclosed by McKinley, the combination would still fail to render claim 2 unpatentable because the external processing equipment does not include a composite signal channel input connected to the composite signal output of the first satellite unit as claimed.

Claim 13, which variously depends from independent claim 1, further defines that the summing circuit is an analog summing circuit. Accordingly, claim 13 is patentable over the combination of Sparkes and McKinley, not only for those reasons presented above with respect to claim 1, but also because the combination fails to disclose or

suggest that the summing circuit is an analog summing circuit. To the contrary, Sparkes specifically recites that the adder 55 is a 24 bit adder which combines two *digital* input signals.

In rejecting claim 13, the Examiner takes Official Notice that "it was obvious at the time of the invention to utilize digital or analog signal processing techniques." However, the mere fact that both digital and analog signal processing techniques were known at the time of the invention is not sufficient to render the required modification to the system of Sparkes obvious absent some motivation to replace the digital adder as taught with an analog summing circuit as claimed. Even if the required modification may be accomplished without "undue experimentation" as suggested by the Examiner, the Examiner still fails to provide *any motivation* to modify the teachings of the cited art. Accordingly, absent proper motivation to modify the teachings of the applied art, the rejection of claim 13 is improper.

Claim 15, which depends from claim 1, further defines that the converting means within the master unit comprises an amplifier circuit. Therefore, claim 15 is patentable over the combination of Sparkes and McKinley, not only for those reasons presented above with respect to claim 1, but also because the combination fails to disclose or suggest that the converting means comprises an amplifier circuit.

In rejecting claim 15, the Examiner asserts that "there is obviously an amplifier circuit in the master unit 18 of McKinley." It appears that the Examiner is asserting that the external processing equipment 18 of McKinley inherently includes an amplifier circuit. However, the Examiner provides no evidence that an amplifier circuit is necessarily required in the external processing equipment of McKinley. Accordingly,

absent explicit disclosure of an amplifier circuit or proper motivation to modify the external processing equipment of McKinley to include an amplifier circuit, the rejection of claim 15 is improper.

Claim 16, which depends from claim 1, further defines that the converting means within the master unit comprises a transformer. Therefore, claim 16 is patentable over the combination of Sparkes and McKinley, not only for those reasons presented above with respect to claim 1, but also because the combination fails to disclose or suggest that the converting means comprises a transformer.

In rejecting claim 16, the Examiner asserts that "there is an obvious need for power in the master unit, therefore one of ordinary skill in the art would have been motivated to provide a transformer or its equivalent in order to provide power." It appears that the Examiner is asserting that there is an inherent need for power, therefore, one skilled in the art would be motivated to utilize a transformer to provide the inherently needed power. However, there are numerous ways to provide power without utilizing a transformer in the master unit as asserted by the Examiner. Therefore, the mere fact that a transformer may provided power is not sufficient in and of itself to render the suggested modification obvious absent some motivation (i.e., suggestion of the desirability) to include a transformer in the master unit. Finally, claim 16 defines that the converting means includes a transformer not the master unit. Therefore, even if *arguendo*, one skilled in the art were motivated to include a transformer in the master unit to provide power as suggested by the Examiner, a power transformer in the master unit is not equivalent to the converting means including a transformer.

Claim 17, which depends from claim 1, further defines that the converting means within the master unit comprises an electronic balancing circuit. Therefore, claim 17 is patentable over the combination of Sparkes and McKinley, not only for those reasons presented above with respect to claim 1, but also because the combination fails to disclose or suggest that the converting means comprises an electronic balancing circuit.

In rejecting claim 17, the Examiner asserts that "balancing was a well known technique in the art of sound mixing in order to convey a specific audio listening environment." However, the Examiner fails to provide any motivation for including a balancing circuit in the converting means as claimed. Furthermore, the system of Sparkes includes balancing means without modification. (See column 7, lines 58-61.) Therefore, one skilled in the art would not have been motivated to modify the system of Sparkes to achieve functionality achievable without modification.

Claim 23, which depends from claim 1, further defines that the master unit and the satellite units are each contained in a separate housing, and that they are interconnected by cables. Therefore, claim 23 is patentable over the combination of Sparkes and McKinley, not only for those reasons presented above with respect to claim 1, but also because the combination fails to disclose or suggest that the master unit and the satellite units are each contained in a separate housing, and that they are interconnected by cables.

In rejecting claim 23, the Examiner points to column 5, lines 35-40 of Sparkes as disclosing that the satellite units and the master unit are each housed in a separate unit. In addition, the Examiner takes Official Notice that "it was obvious to connect them with cables." The Examiner's rejection is improper for the following reasons.

First, column 5, lines 35-40 of Sparkes clearly discloses that the input channels (which the Examiner equates to the claimed satellite units) are housed in the same housing (i.e., the mixer) inasmuch as each input is formed on a printed circuit board with edge connectors for rapid connection and disconnection to a base mother board. In addition, as noted by the Examiner with regard to claim 1, Sparkes fails to disclose a master unit as claimed. Accordingly, the disclosure of Sparkes cannot be interpreted as disclosing a master unit in a separate housing.

Second, with regard to the Examiner's Official Notice, again it is unclear to Applicant whether the Examiner is taking Official Notice that the use of cables were known in the art, or that it would have been obvious to use cables in the system of Sparkes. In either case, the Examiner's assertion is unfounded.

First, the mere fact that cables are well known in the art is not sufficient to render their use obvious absent some motivation to replace the circuit connection of Sparkes with cables. Second, taking Official Notice to assert the obviousness of a modification to a prior art system is *per se* improper.

Claims 8-12, 14, 18, 24, 27, and 30 variously depend from independent claim 1. Therefore, claims 8-12, 14, 18, 24, 27, and 30 are patentable over the combination of Sparkes and McKinley for at least those reasons presented above with respect to claim 1. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1, 2, 8-18, 23, 24, and 27-30 under 35 U.S.C. § 103(a).

On page 4 of the Action, the Examiner rejects claims 5-7, 19, and 25 under 35 U.S.C. § 103(a) as being unpatentable over Sparkes in view of McKinley, further in view

of U.S. Patent No. 6,246,773 to Eastty ("Eastty"). Applicant respectfully traverses this rejection.

Claims 5-7, 19, and 25 variously depend from independent claim 1. Therefore, claims 5-7, 19, and 25 are patentable over the combination of Sparkes and McKinley for at least those reasons presented above with respect to claim 1. Eastty discloses an audio signal mixing console that utilizes an adaptive filter to correlate a first signal mixed from a stereo source and a second signal from a spot microphone source. However, Eastty fails to overcome the deficiencies of Sparkes and McKinley.

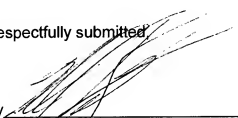
Accordingly, claims 5-7, 19, and 25 are patentable over the combination of Sparkes, McKinley, and Eastty because the Examiner fails to establish a *prima facie* case of obviousness as discussed above with respect to claim 1.

The application is in condition for allowance. Notice of same is earnestly solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Penny Caudle (Reg. No. 46,607), at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: September 1, 2006

Respectfully submitted,



By _____
Michael K. Mytter
Registration No.: 29,680
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant